Notice of Allowability	Application No.	Applicant(s)	
	09/853,366	DEFOSSE ET AL.	
	Examiner	Art Unit	
	Philip C. Lee	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *8/24/05*.

2. ☒ The allowed claim(s) is/are *4,5,8,10,11,15,23,27 and 30-35*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 8/24/05,9/2/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *9/13/05* .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Thomas R. Felger, reg. no. 28,842 on September 13, 2005.

3. The application has been amended as follows:

a. Cancel claim 20,

20. (canceled)

b. Replace claim 31 to read as of the following:

In Claim 31,

31. (currently amended) A method for communicating information, associated with states of a remote device, between a network operations center and the remote device using a wide area network device and a local area network device comprising:

communicating information associated with the states of the remote device between the network operations center and the remote device using a DEX/UCS protocol for transmitting data, based on an original DEX/UCS data block associated with the states of the remote device;

communicating information associated with the states of the remote device between the network operations center and the remote device using a delta scheme for transmitting data between the wide area network device and the local area network device to reduce the amount of data necessary to provide a complete update of information concerning the remote device stored at the network operations center and an associated database;

storing a previous state of the remote device selected from the group consisting of inventory levels, conditions of device hardware and any other characteristic capable of being monitored and contained in the original DEX/UCS data block stored in the database associated with the network operations center;

transmitting at least one request for information concerning a current state of the remote device from the network operations center to the remote device;

transmitting an error checking cyclic redundancy check value from the network operations center to the at least one remote device as part of the request;

receiving the at least one request by the remote device;

establishing the current state of the remote device selected from the group consisting

of inventory levels, conditions of device hardware and any other characteristic capable of being monitored and communicated using the DEX/UCS protocol in response to the at least one request;

selecting records at the remote device based upon the at least one request as specified in a template from the original DEX/UCS data block;

restructuring, at the remote device, the selected records in a preferred order according to the template;

calculating a delta between the restructured records corresponding with the current state of the remote device and a stored set of restructured records corresponding with a previous state of the remote device;

applying a data compression algorithm to the calculated delta;

restructuring of the selected records, based upon the template, allowing higher compression ratios to be achieved when the data compression algorithm is applied to the calculated delta;

preparing a device response at the remote device which includes a current cyclic redundancy check value and the compressed delta, wherein the current cyclic redundancy check value is calculated based on a comparison of the error checking redundancy check value from the network and a cyclic redundancy check value accessible by the remote device; (pages 19-20, spec.)

transmitting the device response to the network operations center;

receiving the device response at the network operations center; and

creating a current state of the remote device at the network operations center based on

stored values in the associated database, the current cyclic redundancy check value and the compressed delta provided in the device response.

~~transmitting the delta between the restructured records to the network operations center; and~~

~~recreating the current state of the remote device at the network operations center using the delta between the restructured records and the previous state stored in the database.~~

c. Replace claim 32 to read as of the following:

In Claim 32,

32. (Currently amended) A method for communicating data between a network operations center and at least one remote device comprising:

receiving data from the remote device at the network operations center and transmitting data from the network operations center to the remote device;

processing data received from the remote device at the network operations center and storing the processed data in a database associated with the network operations center;

transmitting a data request for a current state of the at least one remote device from the network operations center to the at least one remote device;

transmitting an error checking cyclic redundancy check value from the network operations center to the at least one remote device as part of the data request;

establishing a current state for the at least one remote device by selecting records from

a data block at the remote device indicative of the current state of the remote device;

restructuring the selected records at the remote device, based upon a template, to establish the current state of the remote device;

accessing a previous state for the at least one remote device;

calculating a delta between the current state and the previous state for the at least one remote device;

applying a data compression algorithm to the calculated delta;

restructuring of the selected records, based upon the template, allowing higher compression ratios to be achieved when the data compression algorithm is applied to the calculated delta;

preparing a device response at the remote device which includes a current cyclic redundancy check value and the compressed delta, wherein the current cyclic redundancy check value is calculated based on a comparison of the error checking redundancy check value from the network and a cyclic redundancy check value accessible by the remote device; (pages 19-20, spec.)

transmitting the device response to the network operations center;

receiving the device response at the network operations center; and

creating a current state of the remote device at the network operations center based on stored values in the associated database, the current cyclic redundancy check value and the compressed delta provided in the device response.

d. Replace claim 33 to read as of the following:

In Claim 33,

33. (currently amended) A system for communicating data between a network operations center and at least one remote device comprising:

a wide area network operable to communicate data between the network operations center and the remote device;

the network operations center operable to establish communications with the remote device using the wide area network;

the remote device operable to establish communications with the network operations center using the wide area network;

the network operations center operable to process data received from the remote device and to store the processed data in an associated database;

a data block having at least one set of records communicatively coupled to the remote device;

the remote device operable to receive a request for data from the network operations center;

the remote device operable to receive an error checking cyclic redundancy check value from the network operations center as part of the request;

the remote device operable to select records from the data block based on the data request from the network operations center;

a template for restructuring the selected records by the remote device;

the remote device operable to restructure the selected records according to the template;

the remote device operable to calculate a delta between the restructured records and a stored set of records according to the template;

the remote device operable to apply a data compression algorithm to the calculated delta;

the remote device operable to restructure the selected records, based upon the template, allowing higher compression ratios to be achieved when the data compression algorithm is applied to the calculated delta;

the remote device operable to prepare a device response which includes a current cyclic redundancy check value and the compressed delta, wherein the current cyclic redundancy check value is calculated based on a comparison of the error checking redundancy check value from the network and a cyclic redundancy check value accessible by the remote device; (pages 19-20, spec.)

the remote device operable to transmit the device response to the network operations center;

the network operations center operable to receive the device response; and

the network operations center operable to create a current state of the remote device based on stored values in the associated database, the current cyclic redundancy check value and the compressed delta provided in the device response.

~~a data compression algorithm operably coupled to the remote device;~~

~~the data compression algorithm operable to reduce the delta in size with a higher compression ratio resulting from use of the template; and~~

~~the remote device operable to transmit the compressed delta to the network operations center using the wide area network.~~

e. Replace claim 34 to read as of the following:

In Claim 34,

34. (currently amended) The system of Claim ~~34~~ 33 wherein that at least one remote device comprise a vending machine.

f. Replace claim 35 to read as of the following:

In Claim 35,

35. (currently amended) The system of Claim ~~35~~ 34 further comprising a plurality of vending machines.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Lee whose telephone number is (571) 272-3967.

Philip Lee

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100